Electronic Version
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Claims

[c1] An active keyed locking system for a vehicle comprising:
a keyed actuated device;
a position sensor proximate to isaid keyed actuated device and generating a position signal indicative of position of said keyed actuated device; and
a controller electrically coupled to said position sensor and enabling at least one vehicle component in response to said position signal.

[c2] A system as in claim 1 wherein said keyed actuated device is a lock assembly.

[c3] A system as in claim 1 wherein said keyed actuated device is a key.

[c4] A system as in claim 3 wherein said key comprises a signal generator generating a transmission signal.

[c5] A system as in claim 3 wherein said key comprises a field-altering device.

[c6] A system as in claim 3 wherein said key comprises a magnetic device.

[c7] A system as in claim 3 wherein said key comprises:
a coil; and
a transponder coupled to said coil and generating a transmission signal.

[c8] A system as in claim 3 wherein said key generates an authorization signal, said controller enabling at least one vehicle component in response to said authorization signal.

[c9] A system as in claim 1 wherein said position sensor is selected from at least one of a series of magnets, a coil, a potentiometer, an encoder, an optical sensor, an infrared sensor, a hall effect sensor, a rotary variable differential transformer, a rotary variable inductance transducer, an angular position sensor, or a resolver.

[c10] A system as in claim 1 wherein said position sensor is coupled within a base station.

[c11] A system as in claim 1 wherein said controller enables a vehicle component selected from at least one of a vehicle accessory, an ignition, a door lock, and a vehicle system in response to said position signal.

[c12] A system as in claim 1 further comprising a recognition device recognizing a key and generating a recognition signal wherein said controller enables the active keyed

locking system in response to said recognition signal.

[c13] A system as in claim 1 wherein said keyed actuated device is a lock assembly, said lock assembly comprising a key antenna.

[c14] An ignition enabling system for a vehicle comprising:
a key having a transponder;
a lock assembly;
a position sensoh proximate to said lock assembly and generating a position signal indicative of a position of the key; and
a controller electrically coupled to said position sensor and enabling at least one vehicle component in response to said position signal.

[c15] A method of enabling at least one vehicle component through use of an active keyed locking system comprising:
actuating a keyed actuated device;
determining position of said keyed actuated device and generating a position signal; and
enabling the at least one vehicle component in response to said position signal.

[c16] A method as in claim 15 further comprising:
recognizing a key and generating a recognition signal;

and
enabling an active keyed locking system in response to said recognition signal.

[c17] A method as in claim 16 further comprising activating a base station in response to said key recognition.

[c18] A method as in claim 15 further comprising:
generating a first authorization signal;
generating a second authorization signal in response to said first authorization signal;
verifying said second authorization signal; and
generating said position signal in response to said verification.

[c19] A method as in claim 15 wherein determining position of said keyed actuated device comprises:
generating at least one base signal;
altering said at least one base signal via actuation of said keyed actuated device; and
generating said position signal in response to said alteration of said at least one base signal.

[c20] A method as in claim 19 wherein said at least one base signal is modulated using a modulation technique selected from at least one of amplitude modulation, frequency modulation, and phase modulation.